

Appl. No. : 10/807,643
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AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated below. Deletions are indicated with ~~striketrough~~ or [[]] and insertions are indicated as underlined.

1.-22. (Cancelled)

23. (Previously Presented) A prosthesis for placement at an os opening from a main body lumen to a branch body lumen; said prosthesis comprising: a radially expandible scaffold having at least a first wall pattern; and at least two circumferential anchors extending axially from an end of the scaffold, said anchors adapted to extend axially into and expandably circumscribe at least one-half of the main vessel wall when the scaffold is implanted in the branch lumen with said one end adjacent the os, said prosthesis additionally having a region with a second wall pattern that is different from the first wall pattern, said second wall pattern permitting the anchors to both bend and rotate relative to the prosthesis.

24. (Previously Presented) A prosthesis as in Claim 23, comprising at least three circumferential anchors extending axially from the end of the scaffold.

25. (Previously Presented) A prosthesis as in Claim 23, wherein the anchors have an axial length which is at least 1.5 times the width of the scaffold prior to radial expansion.

26. (Previously Presented) A prosthesis as in Claim 23, wherein the anchors have an axial length of at least 2 mm.

27. (Previously Presented) A prosthesis as in Claim 23, wherein the scaffold comprises a plurality of axially adjacent cells.

28. (Previously Presented) A prosthesis as in Claim 23, wherein the circumferential anchors are all congruent.

29. (Previously Presented) A prosthesis as in Claim 23, wherein the circumferential anchors will radially expand when the scaffold is radially expanded.

30. (Previously Presented) A prosthesis as in Claim 23, further comprising a radiopaque marker at or near the region with the second wall pattern.

31. (Previously Presented) A prosthesis as in Claim 23, mounted on a balloon wherein the balloon has a radiopaque marker aligned with the region between the scaffold and the circumferential anchors.

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32. (Previously Presented) A method for deploying a prosthesis across an Os opening from a main lumen to a branch lumen, said method comprising: positioning a first prosthesis so that a scaffold lies within the branch lumen and at least two circumferential anchors extend into the main lumen; radially expanding the scaffold to implant said scaffold in the branch lumen; circumferentially deforming the anchors such that at least one of said anchors bends and rotates relative to the prosthesis, said deforming causing the anchors to circumscribe at least a portion of the main lumen wall and open a passage through the anchors; and deploying a second prosthesis within the passage through the anchors.

33. (Previously Presented) A method as in Claim 32, wherein at least three circumferential anchors extend into the main lumen.

34. (Previously Presented) A method as in Claim 32, wherein positioning the first prosthesis comprises aligning a visible marker on at least one of the prosthesis and a delivery balloon with the Os.

35. (Previously Presented) A method as in Claim 32, wherein the lumens are blood vessels.

36. (Previously Presented) A method as in Claim 32, wherein the scaffold is expanded with a balloon expanded within the scaffold.

37. (Previously Presented) A method as in Claim 36, wherein the anchors are deformed by expanding a balloon positioned transversely through the anchors.

38. (Previously Presented) A method as in Claim 37, wherein the scaffold and anchors are expanded and deformed by the same balloon.

39. (Previously Presented) A method as in Claim 37, wherein the scaffold and anchors are expanded and deformed by different balloons.

40. (Previously Presented) A method as in Claim 32, wherein the second prosthesis is deployed by a balloon catheter exchanged over a guidewire pre-positioned for deformation of the anchors.

41. (Previously Presented) A method as in Claim 32, wherein the anchors are deformed by deployment of the second prosthesis.

42. (Currently Amended) A method as in Claim 32, wherein the deployed second ~~stent~~ prosthesis supports the anchors over their lengths from the Os over the main lumen wall.